



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/881,151	06/14/2001	Erik Paulsen	00-576	6369

7590 02/05/2002

PETER P. SCOTT  
INTELLECTUAL PROPERTY LAW DEPARTMENT  
LSI LOGIC CORPORATION  
1551 McCARTHY BLVD., M/S D-106  
MILPITAS, CA 95035

EXAMINER

TRAN, THANH Y

ART UNIT	PAPER NUMBER
----------	--------------

2841

DATE MAILED: 02/05/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/881,151

Applicant(s)

ERIK PAULSEN

Examiner

Thanh Y. Tran

Art Unit

2841

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_.
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_ 6) ☐ Other:

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-4 and 6-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Nguyen (U.S. 5,477,933).

As to claim 1, Nguyen discloses a converter device (Fig. 1) comprising a board (13) having a first side and a second side, wherein the first side includes a first set of contacts (12) suitable for electrically contacting an integrated circuit (11) having a first configuration; and the second side includes a second set of contacts (23) suitable for electrically contacting a circuit board (25) having a second configuration, wherein the second set of contacts (23) are communicatively coupled to the first set of contacts (12) (see Fig. 1, col. 3, lines 25-36); wherein contacts (12) of the integrated circuit having a function configured in the first configuration are not arranged with contacts (23) of the circuit board (25) having a corresponding function configured in the second configuration (see Fig. 1).

As to claim 2, Nguyen discloses a converter device (Fig. 4) wherein a device (11) having the first configuration is unsuitable for direct contact and operation with a device (25) having the second configuration.

As to claim 3, figure 1 shows a converter device (Fig. 1) comprising an integrated circuit (11) having a set of contacts (12) arranged in the first configuration. Figure 1 shows a circuit

Art Unit: 2841

board (25) having a set of contacts (23) arranged in the second configuration (see col. 4, lines 10-30).

As to claim 4, Nguyen discloses a converter device (Fig. 1) wherein the integrated circuit set of contacts (see Fig. 1, elements 12) includes at least one contact (12) having a function corresponding to a function of a contact of the circuit board (Fig. 1, element 25, col. 3, lines 25-36), the integrated circuit contact positioned so that when the integrated circuit (Fig. 1, element 11) is arranged with the circuit board (25), the integrated circuit contact is not positioned for electrical coupling to the contact of the circuit board having a corresponding function (see Fig. 1).

As to claim 6, Nguyen discloses a converter device (Fig. 1) wherein the first set of contacts (12) is electrically connected over an electrical connection (19) to the second set of contacts (23).

Claim 7 recites limitations similar to claim 1. Nguyen further discloses an apparatus (Fig. 1) comprising an integrated circuit (11) including a set of contacts (see Fig. 1, element 14), wherein the integrated circuit set of contacts is suitable for operation in a first configuration; a circuit board (see Fig. 1, element 25) including a set of contacts, wherein the circuit board set of contacts (23) is suitable for operation in a second configuration; and a converter device (see Fig. 1, element 13) disposed between the integrated circuit (11) and the circuit board (25). Thus claim 7 is rejected for the same reasons.

Claim 8 recites limitations similar to claim 1. Therefore, it is rejected for the same reasons.

Claim 9 recites limitations similar to claim 2. Therefore, it is rejected for the same reasons.

As to claim 10, figure 4 shows an apparatus wherein the first set of contacts (12) is disposed to the second set of contacts (23) as at least one of opposing sides of the converter device (13) and sharing a side of the converter device (13).

Claim 11 recites limitations similar to claim 4. Therefore, it is rejected for the same reasons.

As to claim 12, figure 4 shows the converter device includes a first converter board (13) and a second converter board (28).

As to claim 13, figure 4 shows the first converter board (13) includes the first set of contacts (12) and the second converter board (28) includes the second set of contacts (29), the first set of contacts (12) being communicatively coupled to the second set of contacts (29) utilizing an intermediate set of contacts (23).

Claim 14 recites limitations similar to claims 1 and 3-4. Nguyen further discloses an apparatus (see Fig. 1) comprising an integrated circuit (11) including a set of contacts (12), wherein the integrated circuit set of contacts (12) is suitable for operation in a first configuration; a circuit board (25) including a set of contacts (23), wherein the circuit board set of contacts (23) is suitable for operation in a second configuration; and a converter device (13) disposed between the integrated circuit (11) and the circuit board (25).

As to claim 15, figure 1 shows an integrated circuit (11) configured for contacting the first set of contacts (12) of the converter device (13) includes at least one contact (12) positioned so as to be unsuitable for direct contact and operation with the circuit board (25).

Claim 16 recites limitations similar to claim 2. Therefore, it is rejected for the same reasons.

Claim 17 recites limitations similar to claim 10. Therefore, it is rejected for the same reasons.

Claim 18 recites limitations similar to claim 1. Therefore, it is rejected for the same reasons.

Claim 19 recites limitations similar to claim 12. Therefore, it is rejected for the same reasons.

Claim 20 recites limitations similar to claim 13. Therefore, it is rejected for the same reasons.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim is rejected under 35 U.S.C. 103(a) as being unpatentable over Nguyen (U.S. 5,477,933).

As to claim 5, Nguyen is silent teaching the converter device comprising a power layer and a ground layer. However, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have a converter device comprising a power layer

Art Unit: 2841

for distribute the uniform power in the circuit board; and a ground layer for shielding and protecting the circuit board.

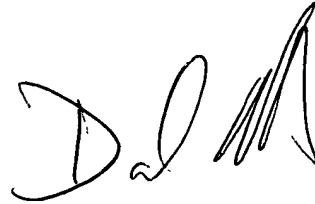
**Contact Information**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thanh Y. Tran whose telephone number is (703) 305-4757. The examiner can normally be reached on Monday through Thursday and on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeff Gaffin, can be reached on (703) 308-3301. The fax phone number for the organization where this application or proceeding is assigned is (703) 305-4311.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-9556.

TYT

A handwritten signature in black ink, appearing to read 'D. Martin', with a stylized flourish at the end.

**David Martin  
Primary Examiner**